biological database. Details of the scheme have barely been discussed in Britain but it has enormous implications for society. Its supporters say the information would boost our scientific understanding of the most common diseases which cause premature death.

The UK Biobank resource will be managed centrally from a coordinating centre that will have overall responsibility for delivering the project including data management and quality assurance, computing and financial management and formal custodianship of the data and biological samples. It will also coordinate several regional centres which will be responsible for participant recruitment and initial data and sample collection. The Manchester base will be set up as a charitable company limited by guarantee, jointly owned by the funding partners; the Medical Research Council, the Wellcome Trust and the Department of Health.

Under the scheme half a million middle-aged people will be picked at random and invited by their doctor to provide general information about their health. They will be asked to give a blood sample, be interviewed by a nurse and complete a questionnaire about their lifestyle, physical environment, diet and health.

They will then be studied over 10, 20, 30 or maybe 50 years, to look at how their destiny is shaped by the twin influence of genes and environment. In particular, it is the biomarkers in the blood that are present because of the function of a gene, which excite researchers.

There will also be a separate oversight body to oversee the work, independent of both the users of the information and the scientists involved in developing it. The oversight body will be responsible for ensuring that the samples and the data collected are used responsibly and within the terms of the consent obtained from the participants. But how reassuring this will be to participants worried about some of the potential aspects of the study is yet to become clear.

How results will out

Britain's Royal Society is looking at how research results are communicated to the public. **Nigel Williams** reports.

Scientific issues have rarely been out of the press in recent years, but many scientists are uneasy about how research is reported to the public. Despite the obvious impact of research findings, relatively little attention has been paid to how and when they should be communicated.

A new working group, chaired by Patrick Bateson, including members from academic and industrial science, scientific and medical publishing, journalism and consumer affairs, is beginning with a call for evidence.

The study will examine closely the practice of peer review. The working group will seek views on whether there are any other methods of quality control or filter. The working group will also ask whether peer review could, or should, be changed to provide the public with greater confidence in research results and whether proposed changes in practice might help or hinder.

For example, some journals and archives are now experimenting with a form of 'open review' in which papers are posted on the web and reviews are added in real time. It has been suggested that this 'less secretive' form of review will benefit authors and referees alike. But what are the implications for the public? Would it mean that more research results enter the public domain before they have been checked for inaccuracies? And, of course, there are claims that peer review is used to suppress controversial new findings that might be of interest to the public, but that the scientific and political 'establishment' do not want aired. The working group would like to receive evidence on whether such claims are justified.

They also want to hear views on whether there is ever a case for researchers announcing their results before they have been subject to peer review.

Throwing light: How do the results of scientific research best get presented to the public. This is the subject of a new inquiry by Britain's Royal Society launched last month. (Picture: Science Photo Library.)